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- 7) Applicant: CHIRON CORPORATION 4560 Horton Street Emeryville California 94608(US)
- Inventor: Shuster, Jeffrey R. 1810 Cole Avenue No. 3A Walnut Creek California 94596(US)
- Representative: Goldin, Douglas Michael et al J.A. KEMP & CO. 14, South Square Gray's Inn London WC1R 5EU(GB)
- (54) High level expression of proteins in yeast.
- © A method is provided for expressing non-yeast proteins under the control of ADH2 regulatory sequences in a yeast host having enhanced expression of ADR I. Transformed yeast hosts are also provided.

EP 0 340 986 A3



EUROPEAN SEARCH REPORT

EP 89 30 4297

|] | DOCUMENTS CONSI | DERED TO BE RELEVA! | VT | |
|--|--|---|--|--|
| Category | Citation of document with in of relevant pas | | Relevant to claim | CLASSIFICATION OF THE APPLICATION (Int. Cl. 4) |
| Y | NATURE, vol. 320, no page 283, London, Gi et al.: "Sequence he regulatory protein / transcription factor * Table 2 * | B; T.A. HARTSHORNE omology of the yeast ADR1 with Xenopus | 1,12 | C 12 N 15/00 C 12 N 1/18 C 12 P 21/02 / (C 12 N 1/18 C 12 R 1:865) |
| Y,D | EP-A-0 196 056 (CH: * Whole document * | IRON CORP.) | 1,12,20 | |
| A | MOLECULAR AND CELLUI no. 5, May 1988, pay American Society for Washington, US; H. I "Regulation of expre of the yeast transcr | ges 1868-1876, r Microbiology, BLUMBERG et al.: ession and activity | | |
| Y,D | MOLECULAR AND GENER/208, 1987, pages 10: Springer-Verlag, Her DENIS: "The effects gene dosage on the rigilucose-repressible dehydrogenase from serevisiae" * Page 105, column | 1-106, idelberg, DE; C.L. of ADR1 and CCR1 regulation of the alcohol Saccharomyces | 20 | TECHNICAL FIELDS SEARCHED (Int. Cl.4) C 12 N C 12 P |
| | The present search report has be | een drawn up for all claims | | - |
| | Place of search | Date of completion of the search | | Examper |
| THE | HAGUE | 17-04-1991 | VAN | PUTTEN A.J. |
| X : par Y : par doc A : tecl O : not | CATEGORY OF CITED DOCUME. ticularly relevant if taken alone ticularly relevant if combined with and ument of the same category hnological background nawritten disclosure trediate document | E : earlier patent of after the filing ther D : document circle L : document circle | ciple underlying the document, but publicate in the application of for other reasons | ished on, or |



| CLAIMS INCURRING FEES | | | | |
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| CLAIMS INCOMING FEED | | | | |
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| | and the second of the second o | | | |
| The present European patent application comprised at the time of filing more than ten claims. | | | | |
| | All claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for all claims. | | | |
| | Only part of the claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid. | | | |
| | namely claims: | | | |
| | No claims fees have been paid within the prescribed time limit. The present European search report has been | | | |
| | drawn up for the first ten claims. | | | |
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| X LA | CK OF UNITY OF INVENTION | | | |
| The Search Division considers that the present European patent application does not comply with the requirement of unity of | | | | |
| invention and relates to several inventions or groups of inventions. | | | | |
| namely: | | | | |
| prot for 2. C expr cont of y term | laims 1-19: Method for expressing a non-yeast ein in a yeast host. Transformed yeast host the expression of this non-yeast protein laims 20-23: A transformed yeast comprising an ession cassette integrated into the genome aining a coding sequence for ADR I under the control east-recognized transcription initiation and ination sequences, said transcription initiation ence being other than the ADR1 promotor. | | | |
| X | All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims. | | | |
| | Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, | | | |
| | namely claims: | | | |
| | None of the further search fees has been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims. | | | |
| 1 | namely claims: | | | |